

Abstract Of The Disclosure

The present invention relates to an interferometric measuring system for measuring, for example, shape deviation, position, surface properties, vibrations, of an object, the measuring system including a transmitting element having a modulation interferometer and a radiation source for short-coherent radiation, as well as a measuring probe system connected thereto for supplying the radiation via a common optical path, and further including a receiving element for analyzing the measuring radiation returning from the measuring probe system, said receiving element being combined with the transmitting element in a transmitter/receiver unit. A reduction in complexity and cost combined with enhanced application possibilities is achieved in that the measuring probe system includes a plurality of measuring probes coupled to the common optical path via respective optical paths, and in that a switching device is disposed at a coupling point between the common optical path and the respective optical paths to the measuring probes, said switching device allowing the different measuring probes to be individually brought into a bidirectionally transmitting connection with the transmitter/receiver unit for the radiation supplied by the modulation interferometer, on the one hand, and the measuring radiation, on the other hand.